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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801.032	03/16/2004	Jun Okazaki	1035-500	1262
23117	7590	11/13/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			MULPURI, SAVITRI	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/801,032		OKAZAKI, JUN	
	Examiner		Art Unit	
	Savitri Mulpuri		2812	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 11-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/04, 6/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the applicant's election of claims 1-10, filed on 8/31/2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-2, 5-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Uchizaki et al (US 6,646,975).

Uchizaki et al teaches a method of making semiconductor laser device including plurality of semiconductor laser elements "240, 241" on a sub mount "354" comprising the steps of : an emission source forming step of stacking a semiconductor layer "212-217" for laser structure "240" and "222-227" for laser structure "241" on a single substrate "210" and forming plurality of emission sources; a mounting step of mounting the substrate with the emission sources "250,251" on the sub mount(fig.10- fig.19 and col. 18, lines 40-53, fig. 24 E).

With respect to claims 1, 0 Uchizaki et al teaches cutting all the way into the substrate by reactive ion etching (see fig. 17, fig. 18, 24A-24C").

With respect to claims 2,5,6 Uchizaki et al teaches cutting all the way into the substrate by reactive ion etching, wherein isolation grooves "236" in layer structure are

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defined by a specific crystal face of semiconductor material of the semiconductor layer structure. (see fig. 17, fig. 18, 24A-24C").

With respect to claims 7-8 Uchizaki et al teaches sub mount is made of ceramic such as AlN, which can be insulator (col. 18, lines 44-45)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3,4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okazaki et al in combination with Tsutsui et al (US 6,197,609)

Okazaki et al do not teach forming isolation grooves at greater interval than the substrate and not tapering towards the substrate. Tsutsui et al teaches forming isolation grooves at greater interval than the substrate and not tapering towards the substrate(see fig.1 and abstract). It would have been obvious to one of ordinary skill in the art to use tapering towards substrate to improve the light emitting devices.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art teaches method of making laser structures..

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Savitri Mulpuri whose telephone number is 571-272-1677. The examiner can normally be reached on Mon-Fri from 8 a.m. to 4.30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lebentritt, can be reached on 571-272-1873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Savitri Mulpuri
Primary Examiner
Art Unit 2812